

LAND USE

Existing Land Use and Development

The 20 square mile planning area is bounded on the north by the Tonto National Forest, on the south by the Jomax Road alignment and the McDowell Mountain Regional Park, on the east by the 184th Street alignment, and on the west by 136th Street. Land use patterns vary from undeveloped 300-acre parcels to homes built on one to five-acre parcels. Although 100 percent of the land is privately owned, most of the land is still undeveloped desert that is impacted in some areas by grazing, unpaved roads, and the 1995 "Rio" fire in the eastern area. The following land use topics will be addressed in this section:

- ◆ Land Development Patterns
- ◆ Zoning Regulations
- Public Land Ownership
- Public Facilities and Utilities
- Special Planning Concerns

Land Development Patterns

Until recently, the Rio Verde Foothills planning area has historically experienced very little residential growth relative to the urbanizing areas of Maricopa County. Isolated ranching operations were the only activity in this region until the 1980s when a few homes began to appear. The distance from metropolitan Phoenix, lack of services, and limited roads delayed residential development. **Figure 3 - Existing Land Use** illustrates the variety of land use patterns that exist within this region.

East of the planning area, Rio Verde was the first residential community to appear in the region following a United States Forest Service (USFS) land exchange. This retirement community, begun in 1974 near the west banks of the Verde River, includes two 18-hole golf courses and about 970 residential units on 710 acres. The Tonto Verde master planned community followed in 1994, after another USFS land exchange resulted in about 695 acres available for development.

West and southwest of the planning area are several golf-course communities, including Desert Highlands, Estancia, Troon Village and Troon Village North. Major north-south roads were improved and extended to serve these developments in the City of Scottsdale. Planned housing densities in these communities range from approximately 2-4 homes per acre, significantly higher than the planning area, which is one home or less per acre. When open space is included, housing densities in Scottsdale's golf communities are closer to 1.5 homes per gross acre.

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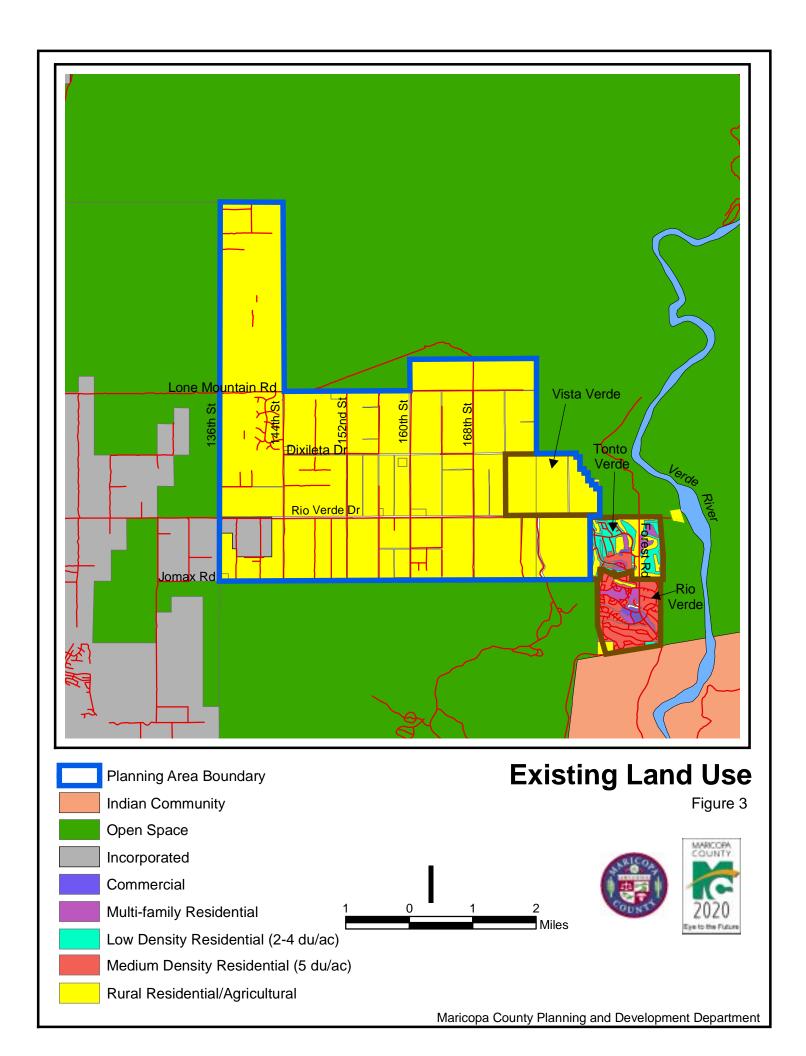
Until 1990, single-family homes on lot splits were the chief development activity in the planning area. Starting in the early 1990s, the planning area began a transition from undeveloped desert land to single-family residential development with a distinctive rural and equestrian character. Around a dozen homes were built during the 1980s, 180 homes were built during the 1990s (mostly in the late 1990s), and nearly 300 new homes were constructed between January 2000 through October 2003.

Existing development is predominantly residential homes, many with horse corrals and accessory buildings, concentrated primarily between 136th and 160th Streets. Few homes are located east of 168th Street. There are two approved subdivisions in the planning area (refer to **Table 9**), including Granite Mountain Ranch Unit I (currently under construction) and Rio Mountain Estates Unit I (construction pending). The Vista Verde Development Master Plan (DMP) was approved in April 2001 (refer to **Table 10**). No construction has taken place in the Vista Verde DMP to date. These developments are further discussed later in this report.

There are two large properties in the planning area that will not be subject to the area plan's policies, but are included in this plan because of their location adjacent to the study area and because of their potential impact on future growth in the Rio Verde Foothills area. Near the southwest corner of the planning area is a 275-acre property owned by Scottsdale National that was annexed by the City of Scottsdale in 1990. Future development of this land will be guided by Scottsdale's General Plan. In October 2001, Scottsdale city council adopted a general plan amendment and a rezoning case for the Scottsdale National property that reduced the number of homes that could be built on this property. The landowner filed a lawsuit against the City challenging the city council's decision to reduce the density permitted on Scottsdale National. The lawsuit was settled between the City and the owner in 2004 and the current zoning for the Scottsdale National property is for an estimated 95 homes on the 275 acres. No development has yet taken place on the property.

The second property, Vista Verde master planned community (856 acres), is located in the eastern end of the planning area and is currently undeveloped desert land. The development master plan approved for Vista Verde will govern future development in the Vista Verde community.

Per the Maricopa County Zoning Ordinance, the Board of Supervisors may permit as a Special Use certain uses in zoning districts from which they are otherwise prohibited. For example, while horse corrals are permitted in the Rural-43 zoning district as a use by right (an allowed use), a public riding and boarding stable must have a Special Use permit and comply with certain stipulations.





Since 1993, seven special use permits have been approved in the planning area (refer to **Table 7**). Three of the special use permits are for riding and boarding stables; one for a training and boarding facility for horses and dogs; one for a kennel; one for an open air facility used for outdoor team-building and problem solving activities; and one for a telephone switching facility.

Table 7: Special Use Permits – Rio Verde Foothills Planning Area

Name	Date Approved	Area (Acres)	Special Use Type	Location
Omega Ltd	April 2, 1993	10	Educational/Recreational Open Air Facility (not equestrian)	Dixileta Dr. and 160 th St.
Casa de los Caballos	September 20, 2000	20	Riding & Boarding Stable	Lone Mountain Rd. and 152 nd St.
E & C Harrison, Inc.	January 4, 2001	5.5	Riding & Boarding Stable	Dixileta Dr. and 144 th St.
Rancho del Sur	December 5, 2001	9	Equine & Canine Training & Boarding Facility	Jomax Rd. and 136 th St.
Almost Home Pet Resort	June 10, 2002	5	Kennel	Rio Verde Dr. and 156 th St.
Midvale Telephone Exchange	July 10, 2002	0.086	Communications Facility	Lone Mountain Rd. and 144 th St.
Four Peaks Ranch	March 17, 2004	16	Equestrian Boarding, Training, and Roping Facility	Rio Verde Dr. and 160 th St.

Agricultural Exemptions

An agricultural exemption can be obtained after the County Assessor assigns an agricultural classification use to the property. Once the property has been classified as exempt, the property is exempt from the Maricopa County Zoning Ordinance and/or Building Safety Ordinance, unless the Maricopa County Planning & Development director determines that all or part of the property is not used primarily for agriculture.

Zoning Regulations

The planning area includes two rural residential zoning districts that Maricopa County enforces through its adopted zoning ordinance: Rural-43 and Rural-190. Both of these districts allow residential uses, farms, recreational, and institutional uses. Rural-43 permits one single-family dwelling per minimum lot area of 43,560 square feet (one acre). Rural-190 permits one single-family dwelling per minimum lot area of 190,000 square feet (4.36 acres). Established zoning district categories are found in *Appendix B- Zoning District Categories* along with an existing zoning

map shown in Figure 17-Existing Zoning.

Public Land Ownership

Figure 4-Land Ownership identifies privately held property in the Rio Verde Foothills planning area and a combination of private land and publicly held land surrounding the planning area. Public property includes areas managed by the federal government, the State of Arizona, Maricopa County, and the City of Scottsdale. Lands governed by the Fort McDowell Yavapai Nation lie approximately two miles southeast of the planning area.

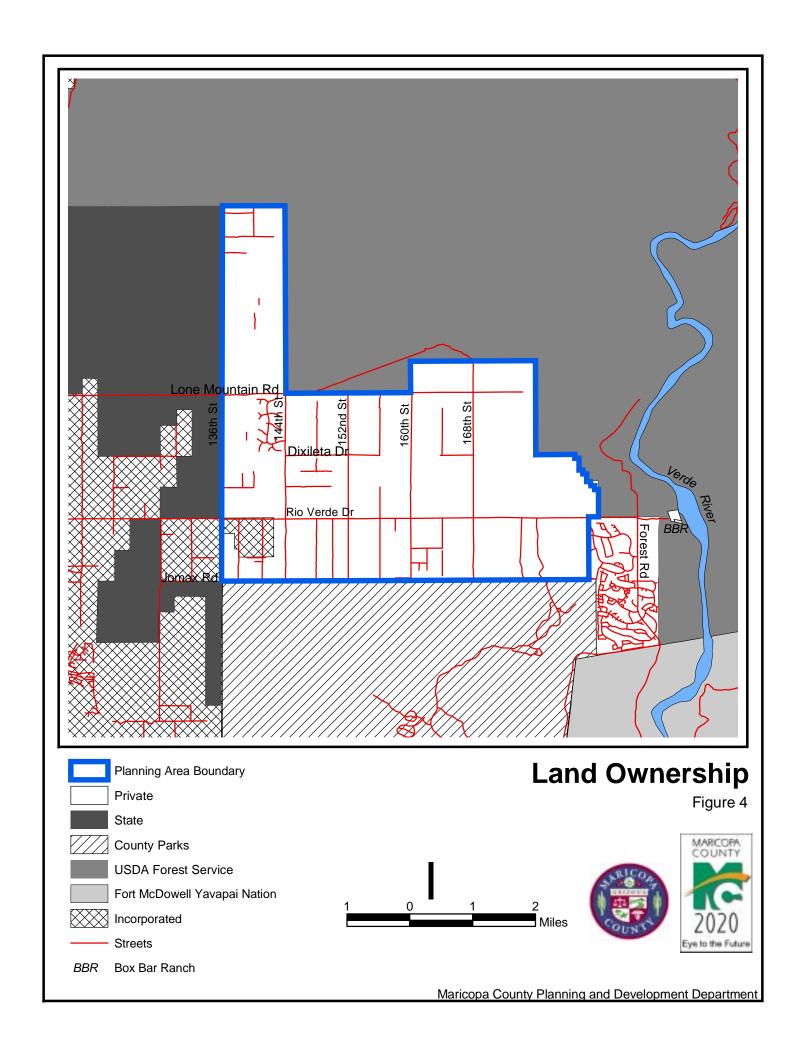
Federal Land

The USFS manages the Tonto National Forest lands north and east of the study area. The Tonto National Forest, occupying nearly three million acres of land, is the fifth largest forest in the United States. The forest has outstanding recreational opportunities year round.

When decreed in the public interest, the USFS has authority to exchange lands with non-federal parties within the boundaries of National Forests within a state. Public interest considerations include: state and local needs; protection of habitats, cultural resources, watersheds, and wilderness and aesthetic values; enhancement of recreation opportunities and public access; consolidation of lands for efficient management; implementation or accommodation of existing or planned land uses or plans; and fulfillment of public needs.

Land exchange records for the planning area were researched in the Tonto National Forest office in Phoenix. In December 1960, the first of several land exchanges occurred in what is now the Rio Verde Foothills planning area, resulting in the transfer of over 20 sections of National Forest land to private ownership. The land exchanges occurred as follows:

- ◆ 1960 Six sections bordering 136th Street and three sections bordering Jomax Road, between 152nd and 176th Streets
- ◆ 1963 Nearly five sections of land bordering the north side of Rio Verde Drive, between the 144th and 184th street alignments
- ◆ 1964 Three and one-half sections of land north of Dixileta Drive, between the 156th and 176th street alignments, including the south half of sections 15 and 16
- ◆ 1965 One and one-half sections north of the Dixileta Drive alignment, between the 144th and 156th street alignments
- ◆ 1971 Sections 32 and 36, south of Rio Verde Drive





In May 1965, the 1,000 acres constituting the original Rio Verde property passed from National Forest land to private ownership, a result of a land exchange involving private land holdings within the Coconino and Sitgreaves National Forest boundaries. The last exchange occurred in 1991, resulting in private land being made available for the Tonto Verde master planned community. Box Bar Ranch, between Tonto Verde and the Verde River, was originally homesteaded by J.F. Asher. Asher filed a claim in 1919, under the Forest Homestead Act of 1906, for nearly 160 acres. This appears to be the only homesteaded land in or near the planning area. The Homestead Act no longer exists.

State Land

The Arizona State Land Department (ASLD) administers thousands of acres of Sonoran desert land west of the planning area. Under state charter, the ASLD has the responsibility on behalf of beneficiaries to assure the highest and best use of the trust lands. Fair market value must be obtained from all trust land transactions. All revenues derived from the sale of trust lands are placed in a fund, which benefits public education and several other public institutions. Leases and sales must occur at public auction. New development, particularly in north Scottsdale, often occurs on newly auctioned trust lands.

In 1996, the state legislature enacted the Arizona Preserve Initiative (API) to give the Land Department authority to reclassify, lease, and sell urban state trust lands to local governments and nonprofit organizations as open space for conservation purposes. Without this legislation, development would likely occur in these areas. In 1998, as part of a long-range conservation plan described below, the City of Scottsdale petitioned the State Land Department to reclassify 16,600 acres of land as suitable for preservation. In August 2001, the State Land Commissioner reclassified 13,021 acres as suitable for preservation and committed to holding off public auction on the remaining land to allow Scottsdale to explore options for purchasing the land.

In 1990, Scottsdale citizens (through the non-profit McDowell Sonoran Land Trust) initiated the preservation of Scottsdale's McDowell Mountains and Sonoran Desert as permanent open space. The recommended study boundary (RSB) for the McDowell Sonoran Preserve includes approximately 36,400 acres (see Figure 13). The Preserve will include natural corridors linking open space in adjacent communities with the Tonto National Forest and the Maricopa County McDowell Mountain Regional Park. In 1995, Scottsdale voters approved a sales tax increase to purchase the land in the original RSB (16,460 acres). In 1998, voters approved using the sales tax to purchase land in the expanded RSB (19,940 acres). Scottsdale

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voters decided on May 18, 2004, to approve a sales-tax increase to fund further acquisition of the Preserve. Scottsdale currently owns over 11,000 acres of land for the Preserve.

Maricopa County

The Maricopa County Parks and Recreation Department administers McDowell Mountain Regional Park, which forms the southern boundary of the planning area. Preliminary purchases and leases of this 21,100-acre park began in the 1940s. One of the largest in the Maricopa County Parks System, McDowell Mountain Park rates as one the most scenic with majestic mountain views and over 40 miles of trails.

City of Scottsdale

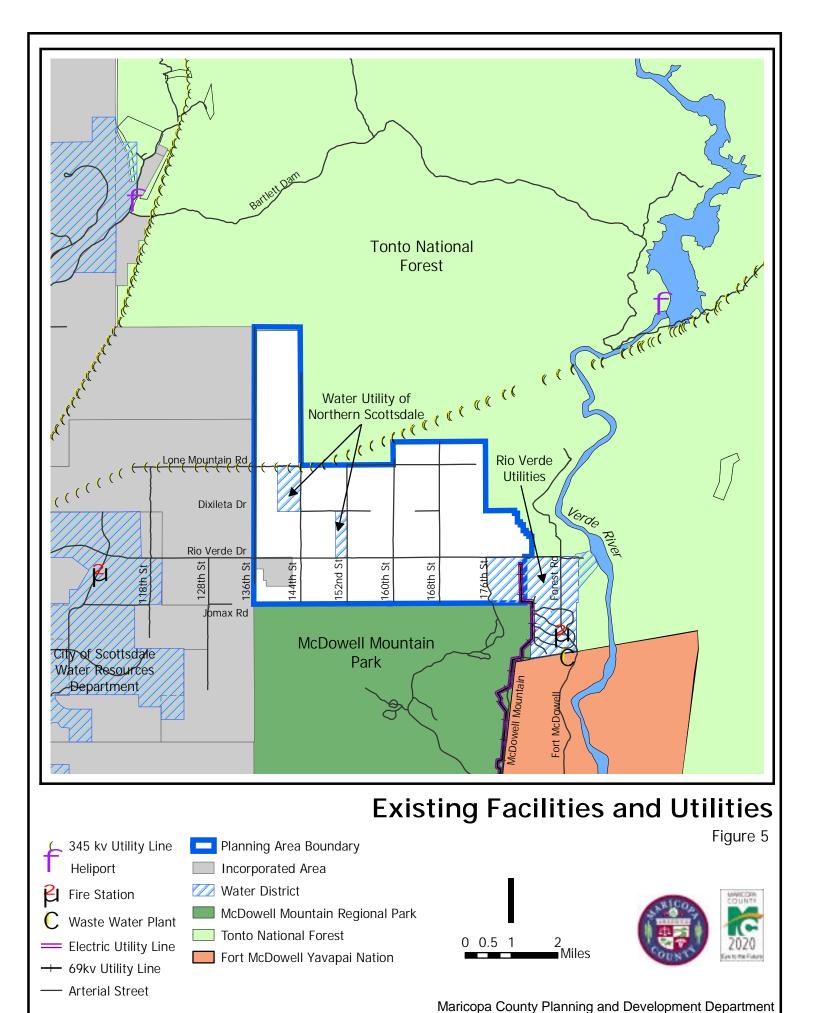
As described earlier, the City owns over 11,000 acres of Preserve land that is being permanently preserved as desert and mountain open space. Scottsdale plans to expand the ownership to include 36,400 acres for the McDowell Sonoran Preserve, an area equivalent to one-third of Scottsdale's total land area. The planned Preserve is located along the western boundary of the Rio Verde Foothills planning area and Scottsdale plans to eventually add all of the State Trust land on the west side of the 136th Street planning area boundary to the city-owned Preserve land.

Tribal Lands

The Fort McDowell Yavapai Nation manages 24,680 acres of land a few miles southeast of the planning area. In 1903, President Roosevelt established the reservation near the military outpost of Fort McDowell. This land is a small percentage of land which was once considered ancestral territory of the Yavapai Indians. Fort McDowell's prime economic activity is its casino, built in 1984. Other tribal businesses include a large sand and gravel quarrying operation, a concrete plant, and a 2,000-acre farm. The community of approximately 1,000 people has an elementary school, a library, a center for the elderly, and its own fire and police department. While development can occur on tribal lands, it is subject to the rules and regulations of the tribal government.

Facilities and Utilities

This section reviews the public and private utilities and facilities in and around the Rio Verde Foothills planning area. This assessment is not intended to provide a detailed, in-depth analysis of operations or specific service programs. Rather, it provides an overview of existing conditions to help determine how current services can help support increased development. **Figure 5** identifies **Existing Facilities** and **Utilities**.





This review is organized into seven subsections:

- Water Distribution Systems
- Sanitary Sewer System
- ♦ Sheriff's Department
- Fire Protection and Medical Emergencies
- Educational Facilities
- Parks and Open Space
- Landfills
- ◆ Electric Power

Water Distribution Systems

Domestic water is obtained from private wells, hauled water, and a private water company. The Water Utility of Northern Scottsdale (no affiliation with City of Scottsdale) was formed in January 2001 to serve the Granite Mountain Ranch and Rio Mountain Estates subdivisions, both north of Rio Verde Drive between 140th and 152nd Streets. In September 2003, this water company began serving residents in Granite Mountain Ranch, as illustrated in **Figure 5**. A water line running parallel to the Dixileta Drive alignment connects the two subdivisions. One hundred percent of the planning area's domestic water supply comes from groundwater aquifers beneath the Rio Verde Foothills region. An in-depth discussion of water resources is included in the Water Resource Element of this Area Plan. Information on water quality is given in the Environmental Resources Element.

Sanitary Sewer System

There are currently no community sewer systems in the planning area. Residential development operates on septic systems.

Sheriff's Department

The Maricopa County Sheriff's Office (MCSO) serves the unincorporated areas of Maricopa County. The MCSO has the responsibility of providing basic patrol, investigative, and detention services to contract towns, cities, and unincorporated communities within the county. The Rio Verde Foothills planning area is within MCSO District IV South. The main station for this district is at 16836 E. Palisades, Building B, Fountain Hills.

Fire Protection and Medical Emergencies

Rural/Metro Corporation currently provides fire protection and ambulance services via subscription in the planning area. However, Rural/Metro decided in November 2003 to opt out of its contract in 2005. As of July 1, 2005, the two existing

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stations will no longer be Rural Metro stations, which will require planning area residents to find another emergency fire/medical provider. Rio Verde Foothills residents are in the process of establishing a fire district. Fire Station 825 is located at 25608 N. Forest Drive in Rio Verde. This facility houses four fighters that include a captain and at least two paramedics. Fire Station 825 has off road equipment that is used for rescues that are inaccessible to an ambulance or fire truck. Station #18, located at Alma School Road and Dynamite Boulevard, opened in 2003. This station is permanently manned and has a brush engine. In 2005, Rural/Metro will no longer provide fire protection and medical emergency services for the City of Scottsdale. Scottsdale is currently creating a new municipal fire department.

Educational Facilities

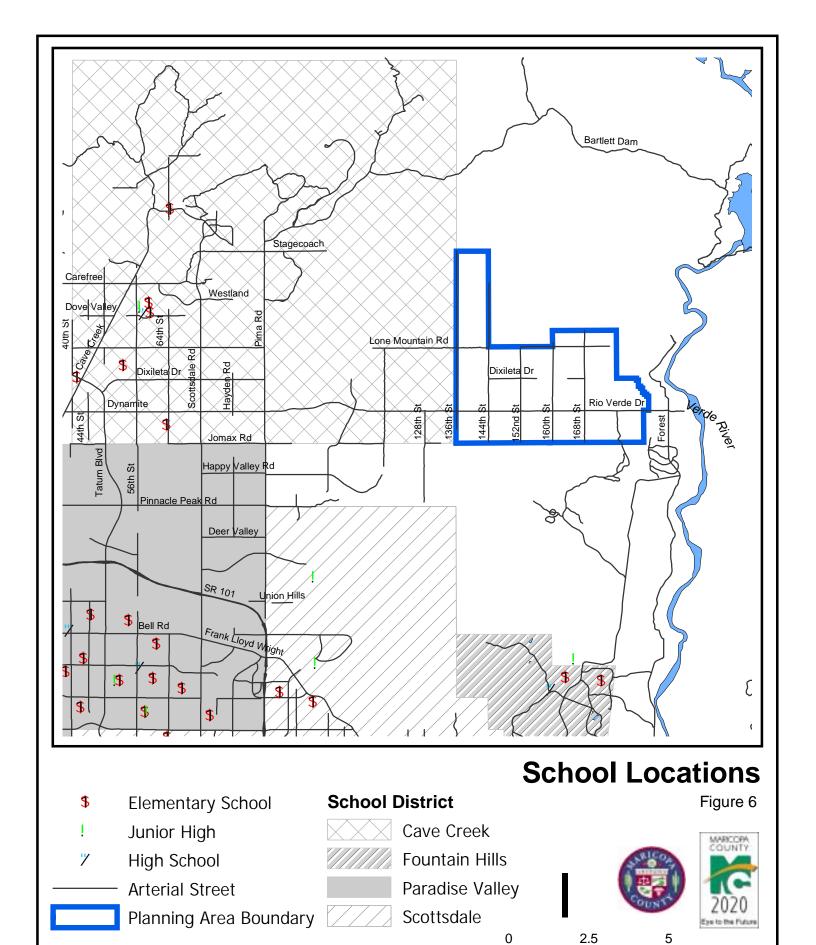
There are no schools within the planning area. School district boundaries and nearest schools are shown in **Figure 6-School Locations**. Most students attend schools in the Cave Creek Unified School District, located west and northwest of the planning area. The District operates four elementary schools serving kindergarten or pre-kindergarten through 5th grade; two middle schools serving 6th through 8th grade; and one high school, which serves 9th through 12th graders. These students are currently bused to the appropriate facilities at cost to the school district. Bus service includes morning and afternoon runs, late runs, and a special needs bus. Currently, less than 25 students from the planning area attend the Fountain Hills Unified School District (FHUSD). The district will plan for bus transportation to the unincorporated area when the number of students reaches 25. FHUSD operates two elementary schools (one serves grades K-2, the other 3-5); one middle school which serves grades 6-8; and one high school which serves grades 9-12.

The Scottsdale School District offers open enrollment for students in the planning area at one elementary and one middle school. Bus service includes two buses each morning and afternoon. Students may also attend the Paradise Valley School District in the Greyhawk subdivision area.

Post-secondary educational facilities are outside of the planning area but within commuting distance, and include several community colleges and Arizona State University in Tempe.

Parks and Open Space

The planning area contains abundant open space as discussed in the Open Space Element. There are no public parks in the planning area, although McDowell Mountain Regional Park forms the southern boundary of the study area. Open space within the planning area is privately owned and can be expected to be developed in the



Maricopa County Planning and Development Department

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future. The planning area, however, is surrounded by thousands of acres of permanently protected open space.

Landfills

There are no landfills in the planning area, although several refuse collection companies operate in the area. One of the major private trash removal companies for the planning area is Waste Management Corporation. Waste Management offers 90-gallon side load trash removal and larger front load trash removal. Temporary dumpsters are also available for construction sites. Waste Management utilizes a transfer station at 19th Avenue and Deer Valley and the Northwest Regional Landfill at 195th Avenue and Deer Valley.

Electric Power

Area residents are served by Salt River Project (SRP) electricity.

Special Planning Concerns

As discussed earlier, the slow-growth pattern of residential development is rapidly changing in the Rio Verde Foothills planning area. Lot splits continue to occur on a frequent basis and hundreds of homes have been constructed on such lots since the year 2000. It appears that this fast pace of development will continue. Rapid growth generates other concerns such as traffic congestion, air pollution, and environmental degradation. Preparing for orderly, timely, and compatible growth is an important component of the Rio Verde Foothills Area Plan.

Two planned subdivisions and one master planned community could add approximately 1,500 residents by 2010. While subdivision regulations require carefully planned traffic circulation, adequate planning for drainage, water supply, power, and other health and safety requirements, lot splits have minimal requirements. Minor land division is the legal division of land into no more than five lots without having to comply with state subdivision laws. The creation of a subdivision through circumvention of existing land division requirements is known as "wildcat subdivision." Early in the lot splitting process, problems may not be apparent, but as the splits continue and more homes are built, both minor land division and wildcat subdivisions can create haphazard conditions, dusty roads, access problems, and costly services. A balance needs to be achieved between private-property rights of a landowner to divide and sell rural lots and the need for sound community growth. **Table 8** – **Land Split Considerations** addresses several issues that should be considered when planning to split a parcel of land.

A unique planning concern of the Rio Verde Foothills area is its remote location between federally protected forest lands and a large county park, which provides both opportunities and constraints. Constraints include limited routes into and out



Table 8: Land Split Considerations

Issue	Consideration	Benefit	Problems To Avoid
Current Zoning	Newly created parcels must meet all zoning requirements, including: Minimum lot width Minimum lot area Building setbacks	Land division meets state and county requirements.	An improper land split renders the property involved unsuitable for building and not entitled to a building or use permit.
Existing Structures	Existing structures such as buildings, wells, septic systems, and driveways should be considered when determining land division.	Existing structures will meet minimum setback requirements without requiring a variance.	Structures that do not meet setback requirements will require a variance to remain on site.
Wastewater Disposal (Septic Systems)	Parcels should reserve adequate space for future on-site septic systems, and a reserve area for future use. Proposed system must meet all setback requirements, including minimum of 100' from any well, and typically 5' to 50' from any property line. Topography is essential to consider.	Newly created parcel has adequate land area to install future septic system and reserve area. Groundwater and drinking water quality is protected.	Improper lot splits can create property lines that overlap existing septic systems. This would typically require both homes to build new septic systems.
Wells	Well spacing requirements: Proposed well locations must be at least 100' from any septic or sewer system, or from another well.	New wells will meet public health codes.	Parcels that are too small may not be able to accommodate both a well and a septic system.
Drainage	Floodplain and drainage guidelines and regulations should be considered when planning land division.	Flood hazards and soil erosion are minimized.	Newly created parcels that do not plan for drainage may cause future flooding and drainage problems on site or for neighbors.
Access: • Public • Private • Fire • Emergency	Parcels should demonstrate physical access that is traversable by a two-wheel drive passenger motor vehicle. A turnaround area is preferred by emergency vehicles. New parcel should not block access to neighboring properties.	Parcels have sufficient access for fire and emergency vehicles. Parcel owner has legal access to property.	Parcels that do not have permanent legal access present problems for the landowner. Lack of access for fire and emergency vehicles presents serious safety problems.
Street and utility rights-of- way and easements	Existing and future rights-of-way and easements should be considered during land division process.	Parcels exclude roadways dedicated to the public and meet zoning requirements without a variance.	Parcels that do not meet zoning requirements after excluding public roadways will require a variance prior to building.
Land Division versus Subdivision	Land divisions of five or fewer parcels must comply with state and county requirements. Splitting a parcel into more than five parcels requires compliance with Maricopa Co. Subdivision Regulations.	Determination that proposed land split does not constitute a subdivision.	Splitting land into more than five parcels requires a Subdivision Public Report issued by the Arizona Dept. of Real Estate (DRE). Subdivisions that cannot provide a Public Report could be in violation.
Topography	Topography such as hills, washes, and boulder outcrops should be considered during land division process.	Attractive topographic features may increase land value / marketability.	Significant cuts, fills or disturbance of washes may impact marketability and value of new parcel(s).



of the area, open range hazards, flooding problems, distance to schools and other services, and limited groundwater availability in many areas. However, the relatively undeveloped desert, the nearby Verde River, and surrounding scenic mountains provide many opportunities for recreation, solitude, and rural activities. Lush Sonoran desert vegetation supports abundant wildlife; the relatively remote setting is favorable for equestrian ranches and other rural uses; adjacent protected open space provides a natural buffer to the community. The Rio Verde Foothills Area Plan will help identify and plan for limitations as well as identify opportunities to plan for recreational trails, develop guidelines for sensitive development, preserve rural character, and ensure a high quality of life.

During the citizen participation phase of this project, land owners expressed the desire to maintain the existing rural character, preserve the scenic beauty of the area, and maintain the dark night sky. These objectives are included in area plan policies. In addition, the action plan recommends creating community-crafted rural development guidelines that would encourage appropriate landscaping, lighting, signage, and other voluntary development guidelines to maintain the rural character and scenic beauty.

Approved Developments

Several residential developments are approved within the study area as shown in **Tables 9 and 10.** In October 2000, Maricopa County approved a final plat for Granite Mountain Ranch Unit 1, and approved the final plat for Unit II in November 2000. Both subdivision plats were amended in February 2002. Home construction has begun only in Unit I. Maricopa County approved the final plat for Rio Mountain Estates in December 2003. All three of these subdivisions are in the Rural-43 zoning district.

Table 9: Recorded Subdivisions

Name	Date Approved	Gross Acres	Number of Residential Lots	Location
	Final Plat: Oct. 4, 2000; Amended plat: Feb. 20, 2002	134	45	North of Dixileta Dr. on 144 th St.
	Final Plat: Nov.15, 2000; Amended plat: Feb. 20, 2002	185.5	55	South of Lone Mountain Rd. on 144 th St.
Rio Mountain Estates Unit I	Final Plat: December 3, 2003	96	54	Between Dixileta Dr. and Rio Verde Dr. on 152 nd St.

Table 10: Development Master Plans

Name	Date Approved	Gross Acres	Number of Residential Lots	Location
Vista Verde	April 18, 2001	856	842	Rio Verde Dr. and 184 th St.

The Vista Verde Development Master Plan (DMP) was approved by Maricopa County in April 2001 (refer to **Table 10**). Owned by the same developer of Tonto Verde and Rio Verde, this 856-acre development is planned for 842 lots at an overall density of 0.98 dwelling units per acre. The project will be marketed as a retirement community with 27 holes of championship golf courses, a clubhouse, recreational facility, and a variety of single-family attached and detached homes. A DMP major amendment was approved August 18, 2004, which reduces the golf course area by nine holes due to drainage and wash issues. Preliminary plat and zoning applications were submitted in June 2004 for Unit 1, which covers approximately one-third of the development. No home construction has taken place in the Vista Verde DMP to date.

Future Land Use Definitions and Guidelines

Definitions and guidelines are included to give a better understanding of the proposed land uses. In addition, for each land use designation the corresponding definitions and guidelines help assure consistent interpretation. Land use categories in the Rio Verde Foothills Area Plan are in agreement with the Maricopa County Comprehensive Plan, and the system of regional land use standards.

Future Land Use Analysis

An analysis of existing land use categories in the Rio Verde Foothills planning area follow each definition. While the goals, objectives, and policies are the basis of the area's desired future land use pattern, the ultimate development pattern is tempered by recognition of these existing development activities and established patterns. This includes consideration for land uses and features outside the planning area that might affect desired future development patterns. In addition, adopted municipal land use plans were considered during the analysis of land uses.

State law requires that rezonings be consistent with the adopted county plan. As such, changes in zoning for specific areas or land parcels must be evaluated in relation to overall advancement of plan goals, objectives, and policies. Guidelines following the land use definitions are used to help ensure that the intent and integrity of the Rio Verde Foothills Area Plan is retained.



Open Space Land Use: Definitions and Guidelines

The preservation of open space, regional connections of open space, and public access to open space are important considerations in the Rio Verde Foothills Area Plan. In addition, the Growing Smarter Law of 1998 requires that Maricopa County plan for the acquisition and preservation of open space. An inventory and analysis of open space is included in the *Open Space* chapter.

The Open Space category denotes areas best suited for open space and recreation. It includes uses such as parks, recreation and scenic areas, and drainage. Residential development of one (1) dwelling unit per acre or less is permitted in certain open space areas, provided development in environmentally sensitive areas like steep slopes, floodplains, and significant wildlife and plant habitats, is in compliance with all applicable federal, state, and county regulations.

The Maricopa County Comprehensive Plan defines two types of open space: Dedicated and Proposed. These categories, as well as potential preservation techniques, are described in the Open Space chapter. It is important to note that Dedicated Open Space areas are those under public ownership (except State Trust Land) such as county parks and land administered by the USFS. Proposed Open Spaces are areas that have been identified for potential open space and recreational purposes and are intended to be managed to protect public access and encourage environmental preservation. However, all private and State Trust Land identified as proposed open space may be developed at residential densities of one (1) residential dwelling unit per acre – subject to applicable planning and zoning regulations – unless it is added to the public domain or protected using other techniques that respect private property rights.

Open Space Land Use: Analysis

Preservation of open space, protection of native wildlife and plants, wildlife habitat, and wildlife movement corridors are key issues identified by planning area stakeholders. The Rio Verde Foothills area is unique from other areas in that 100 percent of the land is privately owned and State or other public land is located outside of the planning area. As such, retention of open space in floodplains and preservation of the Sonoran desert will be a combination of voluntary support by landowners; regulations and drainage guidelines enforced and encouraged by the Maricopa County Planning and Development Drainage Review division; and open space set aside by development.

The open space category identifies areas best suited for potential open space and recreation. Open space increases land values, provides natural flood control, supports wildlife habitat connections, and facilitates recreational uses. Potential open space

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corresponds with all FEMA 100-year floodplains and all Rio Verde preliminary floodplains identified by the Flood Control District of Maricopa County (FCDMC) as shown in **Figure 12-Floodplains**. Preserving these areas as open space is an achievable goal, given the large lot sizes of one acre and more, although it will require the commitment of landowners and careful attention to site design. It should be noted that preservation of the Sonoran desert is encouraged but is not shown on the land use map.

Open Space Protection Techniques

There are a number of techniques used by jurisdictions for protecting and/or acquiring open space. The following is a list of some of these techniques:

- Arizona Preserve Initiative
- Cluster Development
- ◆ Conservation Easements
- Conveyance of Property to
- Homeowner Associations
- Planned Unit Development
- Purchase of Development Rights
- ◆ Slope/Hillside Ordinance
- Transfer of Development Rights

- Land Dedication
- ◆ Land Exchange
- Lease Agreements
- ◆ Performance Zoning
- Density Bonuses
- Design Guidelines
- Federal Land Management
- Fee Simple Purchase
- Impact Fees

(A description of these techniques can be found in the Open Space Element of *Eye to the Future 2020*, Maricopa County's comprehensive plan.)

Residential Land Use: Definitions and Guidelines

The Maricopa County Comprehensive Plan outlines 24 land use categories, five of which are residential. The Rio Verde Foothills Area Plan contains only one residential land use category, although additional categories are permitted within Development Master Plans that may allow higher density development. In addition, other "uses by right," such as schools, churches, and farms are permitted in residential land use categories although special consideration should be given to their specific locations. As with all types of development, care should be given to ensure appropriate preservation of environmental and cultural features such as hillsides, washes, archaeological sites, and other sensitive areas.

In unincorporated Maricopa County, residential density within specific projects is calculated based upon the overall gross acreage of the site. With respect to the Rio Verde Foothills Area Plan land use map, the Rural land use category includes some



land zoned Rural-190 (requires minimum lots of not less than 190,000 square feet or 4.36 acres), while the balance is zoned Rural-43 (requires a minimum lot area of not less than one acre). It is important to note that land use designations do not supercede existing zoning. Land use designations are intended to guide future development, but existing zoning entitlements are not affected.

Rural (0-1 Dwelling Units per Acre)

The rural category identifies areas where single family residential development is desirable because urban services such as sewer, water, schools, parks, roads, and emergency services are limited or nonexistent. Development suitability is determined based on location, access, existing land use patterns, and natural or human constraints. Densities greater than 1 dwelling unit per acre may be permitted in new development, but only if areas of lower densities offset the increase such that an average of no more than 1 dwelling unit per acre is maintained. Uses in this category include agriculture and single family residential.

Residential Land Use: Analysis

Several significant principles guide residential development in the Rio Verde Foothills Area Plan. Particular consideration is given to the continuance of the existing rural lifestyle, the preservation of hillsides and floodplains, and compatibility with the natural environment to protect public health, safety, and general welfare. Therefore, only residential development at very low densities (1 dwelling unit/acre or less) is intended for most of the planning area unless determined otherwise as part of a development master plan. Residents who choose a rural lifestyle should not expect urban services in the unincorporated areas.

Development Master Plans (DMPs)

Master planned communities have long been a preferred type of development in Maricopa County because they promote quality standards of prudent and sustainable land use. The County advocates using DMPs to allow flexibility in the master planning of large tracts of unincorporated land. DMPs provide opportunities for creative design and development techniques, and generally require a high level of commitment to ensuring they have adequate facilities and infrastructure to serve their residents' needs. Master planned communities have the potential to provide mixed land use opportunities, a range of housing choices, open space and recreational opportunities, and a multi-modal transportation system connected to schools, parks, retail, and employment centers. A more complete discussion of DMPs is found in the Maricopa County Comprehensive Plan and the Maricopa County Development Master Plan Guidelines.

C

INVENTORY AND ANALYSIS

While future DMPs can be developed anywhere in the unincorporated Maricopa County, appropriate development guidelines will vary depending on the individual circumstances and the goals, objectives, and policies set forth in the Comprehensive Plan. In addition, a DMP developer must demonstrate how the project will impact the affected area plan, both positively and negatively, at project buildout. While most land in the planning area is currently rural in nature, a DMP would be urban in scale and use. To urbanize an area, a DMP will be required to establish urban level services. Adequate proximity to employment and commercial support services is an important factor. Water supply is one of the most restricting factors for a DMP. If an adequate water supply cannot be obtained, an urban project cannot be realized. Wastewater management is equally restricting in the Rio Verde Foothills area. A new DMP would require the construction of a new wastewater treatment plant or connection to an existing plant with adequate capacity. Any owner/developer wishing to urbanize a rural area will have to address the aforementioned constraints before any large scale planning or development can occur.

Development Agreements and Development Master Plans

Development agreements are voluntary arrangements between local governments and developers concerning the design and construction of specific developments. These agreements protect development from changes in laws and regulations, while allowing governments to obtain specified exactions to ensure infrastructure construction and reinforce local planning efforts. Development agreements offer a way to reduce developers' risk while simultaneously increasing government's ability to guide local development.

Commercial Land Use: Definitions

Small-scale commercial land use categories are used in some rural communities that desire potential service and retail uses. Direct access on arterial streets or freeway frontage roads is an important consideration. Limitations in terms of maximum acreage and building square footage may be used to tailor future development to the specific community. Guidelines for building scale, landscaping, and signage can also be developed. No commercial land use sites are designated in the Rio Verde Foothills Area Plan at this time.

Commercial Land Use: Analysis

During the planning process, the majority of stakeholders strongly expressed the desire that no commercial or retail development be allowed in the planning area. The Rio Verde Foothills Land Use Plan does not contain any commercial land use categories at this time. In future plan updates, citizens may desire to add locations for Neighborhood Retail if population growth warrants.



Employment Center Land Use: Definitions

Employment Center categories denote areas for the concentration of major employers. The majority of citizens in the Rio Verde Foothills area were opposed to allowing major employment centers in the planning area. No employment centers are designated in the Rio Verde Foothills Land Use Plan. A number of stakeholders identified that the horse industry would continue to provide employment opportunities in the area. In addition, home-based businesses provide employment for some residents. It is not anticipated that major employment centers will be needed in the planning area for the next 10 to 15 years.

Employment Center Land Use: Analysis

The lack of employment centers is evident in the Rio Verde Foothills planning area, but is not currently an issue due to the rural nature of development. Because this region will experience significant population growth over the next two decades, residents may desire employment opportunities closer to their homes. According to the 2000 U.S. Census, approximately 345 residents indicated that they were employed, mostly in the Industrial, Other (includes work-at-home and construction employment), and Public sectors. In addition, since geographical constraints prevent the addition of north-south roads, providing residents the opportunity to work near their homes would help reduce traffic congestion, reduce commuting times, improve air quality, and create more efficient land use patterns.

Buffering and Transitional Land Use Guidelines

When two or more types of land uses are shown on the Rio Verde Foothills Land Use Plan or are approved as part of a Development Master Plan, buffering and/or transitional land uses may be necessary. Buffering may consist of open space placed between two incompatible land uses, density transitions, walls, berms, landscaped setbacks, or other recognized methods. Buffering is required for intensive uses where a less intensive use already exists, or where the Rio Verde Foothills Land Use Plan shows a less intense use adjacent to a more intense use. The use of transitional land uses consists of placing uses of intermediate intensity between incompatible uses. Examples which may require transitional land use include:

- Low density, single-family development adjacent to multi-family development.
- Single or multi-family development adjacent to commercial land uses.

In cases where buffering is necessary, these and other methods may be considered:

- Areas of landscaped open space
- Arterial or collector streets with landscaping
- Block walls, landscaping, earth berms
- Any combination of the above



Facilities and Services

The Rio Verde Foothills planning area currently contains a combination of scattered rural development mixed with low-density subdivisions. Most of the single family homes rely on wells and septic systems, although residents in some areas must haul water to their homes. However, Granite Mountain Ranch and Rio Mountain Estates will include potable water service provided by a new private water company. Facilities and services currently available to all residents in the area include emergency fire/medical service, electric and phone service, and sheriff's office patrol. Facilities not currently available to the planning area include community sewer; parks; libraries; and elementary, junior high, and senior high schools.

Maricopa County encourages urban growth (i.e. commercial, employment, and residential density greater than 1 dwelling unit per acre) to occur within the Urban Service Area (USA) where services, infrastructure, and facilities are readily available. The USA is not delineated on the land use map. Rather, it is defined by the ability of a jurisdiction, improvement district, or private entity to provide infrastructure and appropriate urban services to a specific site or project. The USA is considered suitable for higher density development, as well as an area considered efficient to expend public infrastructure funds.

For development outside the Urban Service Area, various facilities, infrastructure, and services may not be required and will be reviewed by the County on a case-by-case basis. Although each development must be considered on its own merits, **Table 11-Facilities Space Standards** provides reference guidelines that should be used when determining and sizing necessary facilities. Park and recreation facility standards are contained in a separate table in the *Open Space* section.



Table 11: Facilities Space Standards

Libraries:

Туре	Space Requirements	Source
Regional Library	40-50,000 sq.ft./80-125,000	Planning for Implementation
	persons	for the Maricopa County
		Library District, 1990
Community Library	15-20,000 sq.ft./30-50,000	Ibid
	persons	
Neighborhood Library	3-5,000 sq.ft./10-20,000 persons	Ibid

Educational Facilities *:

Туре	Space Requirements	Source
Elementary School	8-12 acres, 1 school per 1,500-	U.S. Department of Health,
-	5,000 persons	Education, and Welfare;
		Urban Planning and Design
		Criteria, 3rd edition
Junior High School	20-25 acres, 1 school/1,000-	Ibid
	16,000 persons	
Senior High School	30-45 acres, 1 school/14,000-	Ibid
	25,000 persons	

^{*}Note: These standards are provided as a base reference for the Area Plan. The Cave Creek Unified School District determines standards for all facilities within the school district. Consultation with the appropriate school district is recommended.